Abstract

This paper describes the implementation of two isolated digit recognition techniques and is a comparison between the algorithms implemented. Any digit recognition comprises of mainly two stages feature extraction and similarity evaluation. Here, two feature extraction techniques, namely linear predictive cepstral coefficients (LPCC) and mel frequency cepstral coefficients (MFCC) are implemented and the similarity evaluation is done using Euclidean distance and Dynamic Time Warping (DTW). In DTW both single and averaged template matching is done. The results obtained for these algorithms are perused, compared and conclusions are drawn.

References

Digit Recognition based on Euclidean and DTW


Index Terms
Computer Science Pattern Recognition

Keywords
Digit recognition, linear predictive cepstral coefficients, mel frequency cepstral coefficients, euclidean distance, dynamic time warping.